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#### NOTICE OF ALLOWANCE AND FEE(S) DUE

26161 7590 04/30/2008

FISH & RICHARDSON PC P.O. BOX 1022

MINNEAPOLIS, MN 55440-1022

EXAMINER
TANG, MINH NHUT

ART UNIT PAPER NUMBER

2829 DATE MAILED: 04/30/2008

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNIEY DOCKET NO.
 CONTRIMATION NO.

 10/591\_031
 03/01/2007
 Gerhard Fritz
 14603-028US1P2004\_0195USN
 6646

TITLE OF INVENTION: ENERGY METER DEVICE AND CALIBRATION METHOD

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/30/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correct maintenance fee notifica	ed below or directed otl	ng the Patent, advance on nerwise in Block 1, by (	a) specifying a new co	orres	oondence address; and/or	(b) indicating a separa	orrespondence address as ite "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of undress)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
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							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	FOR	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/591,031 TITLE OF INVENTION	03/01/2007 : ENERGY METER DE	VICE AND CALIBRAT	Gerhard Fritz ION METHOD		14603-02	8US1P2004,0195USN	6646
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300		\$0	\$1740	07/30/2008
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
TANG, MI	NH NHUT	2829	324-142000	_			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DAT. less an assignee is ident h in 37 CFR 3.11. Comp	" Indication form red. Use of a Customer  A TO BE PRINTED ON	or agents OR, alteri  (2) the name of a s registered attorney 2 registered patent listed, no name will  THE PATENT (print or data will appear on th IT a substitute for filing	nativ ingle or a attor I be p r typ re pa an a	firm (having as a memb gent) and the names of u neys or agents. If no nam orinted.	er a 2	rument has been filed for
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	s SMALL ENTITY state	as. See 37 CFR 1.27.			er claiming SMALL ENT		
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other the Office.	an th	e applicant; a registered a	ttorney or agent; or the	assignee or other party in
Authorized Signature					Date		
Typed or printed name			Registration No.				
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this bu (irginia 22313-1450. DC k13-1450.	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain 1.14. This collection is depending upon the in e Chief Information Of COMPLETED FORMS	or re s esti ndivi ffice S TC	etain a benefit by the publ mated to take 12 minutes dual case. Any comment r, U.S. Patent and Traden THIS ADDRESS. SENI	ic which is to file (and I to complete, including s on the amount of time ark Office, U.S. Depar O TO: Commissioner for	by the USPTO to process) gathering, preparing, and e you require to complete tment of Commerce, P.O. r Patents, P.O. Box 1450,

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/591,031	03/01/2007	Gerhard Fritz 14	4603-028US1P2004,0195USN 6646		
26161 7	590 04/30/2008		EXAM	IINER	
FISH & RICHARDSON PC			TANG, MINH NHUT		
P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			ART UNIT	PAPER NUMBER	
			2829		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

### Notice of Allowability

Application No.	Applicant(s)
10/591,031	FRITZ, GERHARD
Examiner	Art Unit
Minh N. Tang	2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence addressAll claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application froi included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon netition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 3/01/2007.
- 2. The allowed claim(s) is/are 1-22.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. A Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
    - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) Thereto or 2) to Paper No./Mail Date
  - (b) ☑ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 20080425.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.  $\square$  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 8/29/06: 3/01/07
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

Notice of Allowability

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Application/Control Number: 10/591,031

Art Unit: 2829

#### DETAILED ACTION

#### Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which
papers have been placed of record in the file.

#### Information Disclosure Statement

 The information disclosure statement (IDS) submitted on August 29, 2006 and March 01, 2007 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

#### Specification

The Preliminary Amendment filed on August 29, 2006 has been entered.

#### Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Drake on April 25, 2008.

The application has been amended as follows:

The following changes to the drawings have been approved by the examiner and agreed upon by applicant: label the drawing as — Fig. 1 — (see attached drawing). In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

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Application/Control Number: 10/591,031

Art Unit: 2829

#### Reasons For Allowance

- Claims 1-22 are allowed over the art of record.
- 6. The following is an examiner's statement of reasons for allowance:

The primary reasons for allowance art that the art of record does not disclose. nor would it be obvious to modify the art of record so as to include the limitations, in combination with the other limitations, an energy meter comprising a phase evaluation block comprising first and second inputs and an output, wherein the first input of the phase evaluation block is electrically connected to the output of the first analog/digital transformer and the second input of the phase evaluation block is connected to the output of the second analog/digital transformer; and a phase correction block comprising a control input electrically connected to the output of the phase evaluation block, wherein the phase correction bock is connected to an output of at least one of the first and second analog/digital transformers and the phase correction block is configured to correct a phase deviation of a digitized signal that is derive from at least one of the current and the voltage as claimed in the independent claim 1; or a method for calibrating an energy meter, comprising determining a phase deviation between the first and second digitized test signals, generating a phase correction signal; and applying the phase correction signal to one or more of the first and second digitized test signals as claimed in the independent claim 16.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Application/Control Number: 10/591,031

Art Unit: 2829

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Communication

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh N. Tang whose telephone number is (571) 272-1971. The examiner can normally be reached on M-Th (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha T. Nguyen can be reached on (571) 272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Minh N. Tang/ 4/25/08 Minh N. Tang Primary Examiner Art Unit 2829